REMARKS

This Amendment and Response is being submitted in response to the *Office Action* mailed November 29, 2006. Claims 1-35 are pending in the application. In the *Office Action*, Claims 1, 3-7, 13, 17, 18, 21, 30, and 31 are rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,874,108 to Abramovici, *et al.* (hereinafter "Abramovici"). Claim 18 is rejected under 35 U.S.C. § 103(a) as being obvious over Abramovici in view of U.S. Patent No. 6,003,150 to Stroud, *et al.* (hereinafter "Stroud"). Claims 2, 8-12, 14-16, 19, 20, 22-29, and 32-35 are objected to as being dependent upon a rejected claim but would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. Applicant appreciates the indication of allowability for the subject matter claimed in claims 2, 8-12, 14-16, 19, 20, 22-29, and 32-35. Applicant respectfully traverses the Examiner's rejections.

Applicant has amended claim 13. No new matter has been added in the Amendment. Support for the Amendment may be found in the Specification and the claims as originally filed. Reconsideration of the pending claims, 1-35, is respectfully requested in light of the amendment above and the remarks below.

I.   Rejection of Claims 1, 3-7, 13, 17, 21, 30, and 31

Claims 1, 3-7, 13, 17, 21, 30, and 31 are rejected under 35 U.S.C. § 102(e) as anticipated by Abramovici. In order to anticipate a claim, a reference must teach every element of a claim. *See* MPEP §2131.

Abramovici describes a method for adjusting the system clock period to account for additional delays due to reconfiguration around faulty resources, which would add delay to signal paths and hence lower the maximum operation frequency. The method includes detecting hard faults, such as opens and shorts in wires. *See* col. 5:32-35. Once the fault is detected, the FPGA under test is reconfigured around the faulty resources. *See* col. 5:49-56. The delay created by the reconfiguration is then estimated. *See* col. 7:36-42. The system clock is then adjusted if necessary. *See* col. 7:41-43. Thus Abramovici describes the ability to estimate the delay in the reconfigured fault-free resources in order to adjust the clock frequency and does not attempt to measure or estimate the delay in the resources that were detected as being faulty.

In contrast, in claim 1, Applicant claims a method for testing a FPGA comprising "(d) determining the interval between receiving the first output signal and the second output signal; [and] (e) identifying a fault in at least one of the first path under test and the second path under test when the interval exceeds a threshold." The claimed method is able to detect faults that only add delay to an otherwise fault-free path as opposed to a hard fault that would be detected in Abramovici. This is a different class of faults.

Thus Abramovici fails to teach every element of claim 1, and claim 1 is thus allowable over Abramovici. Claims 2-7 depend from and further limit claim 1. Accordingly, Claims 2-7 are allowable for at least the same reasons as claim 1.

Similarly, in claim 13, as amended, Applicant claims a system for testing an FPGA comprising an output response analyzer operable to "determine an interval between the time a data signal propagates through the first path under test and the second path under test; and identify a fault in at least one of the first path under test and the second path under test when the interval exceeds a threshold." For the reasons stated above in relation to claim 1, Abramovici does not anticipate claim 13. Claims 17, 21, 30, and 31 depend from and further limit claim 13. Accordingly, Claims 17, 21, 30, and 31 are allowable for at least the same reasons as claim 13.

Applicant respectfully requests that the Examiner withdraw the rejection of claims 1, 3-7, 13, 17, 21, 30, and 31.

II.   Claim 18

Claim 18 is rejected under 35 U.S.C. § 103(a) as being obvious over Abramovici in view of Stroud. To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), a prior art reference must teach or suggest all of the claim limitations.
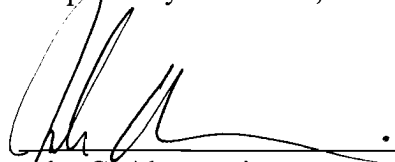
Claim 18 depends from and further limits claim 13. For the reasons stated above, Abramovici does not teach or suggest all of the claim limitations of claim 18. Stroud is introduced as describing the user of a lookup table (LUT) and thus does not cure the deficiencies of Abramovici. Accordingly, Application respectfully requests that the Examiner withdraw the rejection of claim 18.

US2000 9874427.1

III.   Conclusion

Applicants respectfully submit that claims 1-35 are allowable. A favorable Office Action
is respectfully solicited.

Should the Examiner have any comments, questions or suggestions of a nature necessary
to expedite the prosecution of the application, or to place the case in condition for allowance, the
Examiner is courteously requested to telephone the undersigned at the number listed below

                                                     Respectfully submitted,

Date: March 29, 2007

                                                     John C. Alemanni
                                                     Reg. No. 47,384

KILPATRICK STOCKTON LLP
1001 West Fourth Street
Winston-Salem, North Carolina 27101-2400
Telephone: (336) 607-7311
Facsimile: (336) 734-2621